CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2007-____

FOR
MOZZARELLA FRESCA, INC.
TIPTON CHEESE PROCESSING PLANT
TULARE COUNTY

TENTATIVE ORDER

This Monitoring and Reporting Program (MRP) is required pursuant to California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless and until the Regional Board adopts or the Executive Officer issues a revised MRP. Changes to sample location shall be established with concurrence of Regional Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer. All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991 (Standard Provisions). The results of analyses performed in accordance with specified test procedures, taken more frequently than required at the locations specified in this MRP, shall be reported to the Regional Water Board and used in determining compliance.

Field test instruments (such as pH) may be used provided that:

1. The operator is trained in the proper use of the instrument;
2. The instruments are calibrated prior to each use;
3. Instruments are serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions; and
4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

In addition to details specified in Standard Provision, Provisions for Monitoring C.3, records of monitoring information shall also include the following:

1. Method detection limit (MDL);
2. Reporting limit (RL) (i.e., a practical quantitation limit or PQL); and
3. Documentation of cation/anion balance for general minerals analysis of supply water, and groundwater samples.

All laboratory results shall be reported down to the MDL. Non-detected results shall be reported as less than the MDL (<MDL). Results above the MDL, but below the concentration of the lowest calibration standard for multipoint calibration methods or below the reporting limit for other methods shall be flagged as estimated.

All analyses shall be performed in accordance with the latest edition of Guidelines Establishing Test Procedures for Analysis of Pollutants, promulgated by EPA (40 CFR 136) or other procedures approved by the Executive Officer, provided the methods have method detection limits equal to or lower than the analytical methods specified in this MRP. In reporting data, the Discharger shall indicate whether any analysis was performed using a method not in

conformance with EPA's Guidelines. Analyses may also comply with the methods and holding times specified in: Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020, 1983); Methods for Determination of Inorganic Substance in Environmental Samples (EPA/600/R-93/100, 1993); Standard Methods for the Examination of Water and Wastewater, 20th Edition (WEF, APHA, AWWA); and Soil, Plant and Water Reference Methods for the Western Region, 2003, 2nd Edition, 2003.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration after at least 12 months of monitoring, the Discharger may request the MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

DISCHARGE MONITORING

Samples of the discharge shall be collected at a point after the Cavitation Air Floatation (CAF) unit. The Discharger shall monitor the discharge for the constituents and frequencies specified below:

Constituent/Parameter	Units	Type	Frequency
Daily Flow[1]	gal/day	Continuous	Daily
Electrical Conductivity	µmhos/cm	24 hr – Composite[2]	Weekly
pH	pH units	24 hr – Composite	Weekly
Total Suspended Solids (TSS)	mg/L	24 hr – Composite	Monthly
BOD_5[3]	mg/L	24 hr – Composite	Monthly
Total Kjeldahl Nitrogen (TKN)	mg/L	24 hr – Composite	Monthly
Ammonia (as NH_3-N)	mg/L	24 hr – Composite	Monthly
Nitrate(as NO_3-N)	mg/L	24 hr – Composite	Monthly
Total Nitrogen	mg/L	24 hr – Composite	Monthly
Inorganic TDS[4]	mg/L	24 hr – Composite	Monthly
General Minerals[5]	mg/L	24 hr – Composite	Annually[6]

1 Flow shall be measured using a magnetic or ultrasonic flow meter.

2 Unless otherwise approved, 24-hour composite samples shall be collected using a composite wastewater sampler synchronized with flow. Samples shall be refrigerated at 4 ºC (39.2 ºF).

3 Five-day, 20°C biochemical oxygen demand (BOD_5)

4 TDS, shall be determined using EPA Test Method No. 160.1 for combined organic and inorganic TDS and EPA Method No. 160.4 for inorganic TDS.

5 General Minerals shall include the constituents in the General Minerals Analyte List below.

6 In July.

General Minerals Analyte List[1]

Alkalinity (as $CaCO_3$)	Carbonate (as $CaCO_3$)	pH
Arsenic	Chloride	Potassium
Bicarbonate (as $CaCO_3$)	EC	Sodium
Boron	Hardness (as $CaCO_3$)	Sulfate
Calcium	Magnesium	TDS

1. General Minerals Analyte lists may vary depending on the laboratory, but shall include at least the above analytes and properties.

GROUNDWATER MONITORING

Concurrently with groundwater quality sampling, the Discharger shall measure the water level in each well as groundwater depth (in feet and hundredths) and as groundwater surface elevation (in feet and hundreds above mean sea level). The horizontal geodetic location of each monitoring well shall be provided where the point of beginning shall be described by the California State Plane Coordinate System, 1983 datum.

Prior to collecting samples and after measuring the water level, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of the standing water within the well casing and screen, or additionally the filter pack pore volume.

The Discharger shall include in its submittal of groundwater elevation data, a contour map based on said data showing the gradient and direction of groundwater flow under/around the facility and effluent disposal area(s). The groundwater contour map shall also include the location of the monitoring wells and active storage and land disposal areas (i.e., areas receiving treated effluent).

The Discharger shall monitor groundwater for the constituents and frequencies specified below.

Constituent/Parameter	Units	Type of Sample	Frequency
Depth to groundwater	Feet[1]	Measured	Quarterly[2]
Groundwater elevation	Feet above mean sea level	Calculated	Quarterly[2]
pH	pH units	Grab	Quarterly[2]
Electrical Conductivity	µmhos/cm	Grab	Quarterly[2]

Constituent/Parameter	Units	Type of Sample	Frequency
Total Dissolved Solids	mg/L	Grab	Quarterly[2]
Total Organic Carbon	mg/L	Grab	Annually[5]
Ammonia (as NH_3-N)	mg/L	Grab	Annually[5]
Nitrate (as NO_3-N)	mg/L	Grab	Annually[5]
TKN	mg/L	Grab	Annually[5]
Total Nitrogen	mg/L	Calculated	Annually[5]
General Minerals [3]	mg/L	Grab	Annually[5]
Iron[4]	mg/L	Grab	Annually[5]
Manganese[4]	mg/L	Grab	Annually[5]

1 To the nearest hundredth of a foot.

2 January, April, July and October.

3 General Minerals shall include at least the constituents listed in General Minerals Analyte List included herein in the Discharge Monitoring section. An anion/cation balance demonstrating that analyses are complete shall accompany the results.

4 Samples must be filtered prior to preservation.

5 In October.

SOURCE WATER MONITORING

The Discharger's facility supply water shall be monitored for the following:

Constituent/Parameter	Units	Measurement	Frequency
EC[1]	µmhos/cm	Grab	Annually[2]
Nitrate (as NO_3-N)	mg/L	Grab	Annually

1 EC shall be reported as a flow-weighted average from all supply wells. Include copies of supporting calculations with monitoring reports.

2 In July.

USE AREA MONITORING

The Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation area. Data shall be collected and submitted quarterly:

Constituent/Parameter	Units	Type	Frequency
Wastewater application field number	N/A	N/A	Daily
Precipitation	inches[1]	Rain gauge[2]	Daily
Wastewater application area	acres	N/A	Daily
Wastewater flow	mgd	Continuous	Daily
Wastewater loading	inches/day/acre[3]	Calculated	Daily
Supplemental irrigation flow	mgd	Estimated	Daily
Supplemental irrigation flow	inches/day/acre[3]	Calculated	Daily
Total hydraulic loading rate [4]	inches/day/acre[3]	Calculated	Daily
BOD_5 loading rate [5]			
on application day [6]	lbs/acre/day	Calculated	Daily
averaged over application cycle [7]	lbs/acre/day	Calculated	Daily
Monthly nitrogen loading rates[8]			
from wastewater	lbs/acre/month	Calculated	Monthly
from fertilizers	lbs/acre/month	Calculated	Monthly
Cumulative Annual nitrogen loading rate [9]	lbs/acre	Calculated	Monthly
Inorganic TDS loading rates [10]	lbs/acre/month	Calculated	Monthly

1 Report to the nearest 0.1 inch.
2 National Weather Service data from the nearest weather station is acceptable.
3 Report to the nearest 0.001 inch.
4 Includes total liquid application (i.e., precipitation, wastewater, and irrigation water).
5 BOD_5 loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater BOD_5.
6 Application day, as referred to in this MRP, shall be defined as a 24-hour period.
7 Application cycle, as referred to in this MRP, shall be defined as the period (in days) of wastewater application followed by resting interval until next wastewater application.
8 Wastewater nitrogen loading rates shall be calculated using the applied volume of wastewater, actual application area, and the wastewater total nitrogen.
9 Starting as zero each January 1
10 Inorganic TDS loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater inorganic TDS.

In addition, the Discharger shall collect grab samples from the Use Area Irrigation supply wells and analyze them for the following:

Constituent/Parameter	Units	Measurement	Frequency
EC[1]	µmhos/cm	Grab	Annually[2]
Nitrate (as NO_3-N)	mg/L	Grab	Annually

[1] EC shall be reported as a flow-weighted average from all supply wells. Include copies of supporting calculations with monitoring reports.

[2] In July.

REPORTING

The Discharger shall report monitoring data and information as required in this MRP and as required in the Standard Provisions.

Monitoring data and/or discussions submitted concerning the Treatment System's performance must also be signed and certified by the chief plant operator. When reports contain laboratory analyses performed by the Discharger and the chief plant operator is not in the direct line of supervision of the laboratory, reports must also be signed and certified by the chief of the laboratory.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly, whether the Discharger complies with waste discharge requirements. If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

A. Quarterly Reports

***Wastewater**:* Daily, weekly, monthly, and quarterly monitoring data shall be reported in quarterly monitoring reports. Quarterly monitoring reports shall be submitted to the Regional Water Board **by the 1st day of the second month after the calendar quarter** (i.e., the 1st Quarter Report is due by 1 May, 2nd Quarter Report is due by 1 August, and the 3rd Quarter Report is due 1 November). At a minimum, the quarterly reports shall include:

1. Results of discharge, and use area monitoring;
2. Calculated Monthly Average Daily Flow;
3. Daily, Monthly, and Average loading calculations;
4. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;

5. Copies of laboratory analytical reports; and
6. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

Groundwater: Quarterly groundwater monitoring data shall be reported in the quarterly monitoring reports and submitted to the Regional Water Board as detailed in the previous section. Quarterly monitoring reports shall include all monitoring data required from quarterly groundwater monitoring events. The quarterly groundwater monitoring reports shall contain:

1. Quarterly groundwater contour maps;
2. Graphs of the laboratory analytical data for all samples taken from each well within at least the previous five calendar years. Each such graph shall plot over time for a given monitoring well the concentration of one or more waste constituents; and
3. All monitoring analytical data obtained during the quarter presented in tabular form and included with previous data obtained for the given well.

B. Annual Reports

Wastewater: An Annual Report shall be prepared as a fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule plus the results of any annually sampled constituents (general minerals, selected metals, etc). The Annual Report shall be submitted to the Regional Board **by 1 February of the year following the year the samples were collected.** In addition to the data normally presented, the Annual Report shall include the following:

1. The names, certificate grades, and general responsibilities of all persons in charge of wastewater treatment and disposal;
2. The names and telephone numbers of persons to contact regarding emergency and routine situations;
3. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4);
4. The results of an annual evaluation conducted pursuant to Standard Provisions E.4 and a figure depicting monthly average discharge flow for the previous five calendar years;
5. The most recent water supply report including laboratory data;
6. A summary of solids monitoring, including:
   a. Annual solids production in dry tons and percent solids; and
   b. A description of disposal methods. If more than one method is used, include the percentage disposed of by each method.

7. A summary and discussion of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.

Groundwater: An Annual Groundwater Monitoring Report shall be prepared as a fourth quarter groundwater monitoring report. The Annual Groundwater Monitoring Report will include all groundwater monitoring data required in the groundwater monitoring schedule plus the results of any annually sampled groundwater constituents (general minerals, selected metals, etc). The Annual Groundwater Monitoring Report shall be submitted to the Regional Board **by 1 February of the year following the year the samples were collected.** In addition to the data normally presented in the quarterly groundwater monitoring reports, the Annual Report shall include the following:

1. Quarterly groundwater contour maps from the previous four quarters;
2. Graphs of the analytical data for all samples collected from each monitoring well for at least five calendar years. Each such graph shall plot over time for a given monitoring well the concentration of one or more waste constituents specified herein and selected in concurrence with Regional Water Board staff. Graphs shall be plotted at a scale appropriate to show trends or variations in water quality, and shall plot each datum, rather than plotting mean values.
3. All monitoring data obtained during the previous monitoring events for at least the last five calendar years.

All technical reports required herein must be overseen and certified by a California registered civil engineer, certified engineering geologist, or certified hydrogeologist in accordance with California Business and Professions Code, sections 6735, 7835, and 7835.1.

All reports submitted in response to this Order shall comply with the signatory requirements in Standard Provision B.3.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by:_____
PAMELA C. CREEDON, Executive Officer

_____
(Date)

kc/DKP/kes 7/03/07

TENTATIVE ORDER